

My Third Fish Room

By Alan Opdyke

Lynn and I built a new home, or had one built would be technically correct, the first six months of 2008. After settling in and getting the necessities put away about the first week in August of 2008 I began in earnest to build a new fish room. We actually sold our house right after we listed it and long before our new home was ready so the fish were gone and the tanks were completely dry. For all practical purposes I was starting over. The advantage was I had built two rooms prior and had some idea of what I wanted. So here we go with Fish Room Number Three!

Our home is on a slopped lot so our basement is all dirt in the front and we have walk out doors in the back. I choose a rear corner that is almost all covered by dirt to save energy and make heating easier. I also picked the further most location from the stairs so we could, at some time if we wish; add other rooms to the basement.



At this time it is so important to decide where your tanks will be, where the counter and sink will be, where your air pump will go, closet space, water barrels if you so desire etc. To me planning a room out on paper is the key to getting what you want in a finished product. Just like a home, right?

I framed the walls with standard studs as our basement walls are nine foot tall and a standard room would allow me savings on materials of all sorts and allow a dead air space between the room ceiling and our upstairs floor and joists. Framing is easy if you've ever watched someone do it. Just be as careful as you can to make the room square and level.



A few things I wanted to consider was where my counter top and sink would be, where would the actual racks for tanks go, since I use 55 gallon plastic barrels for aging water where would they go and how would I fill them easily? Then I thought about siphoning. Since I use a small self priming centrifugal pump for siphoning tanks and removing debris I gave serious thought as to where that should go. It is a noisy little bugger and it has a very high pitched sound to it. I decided to place that pump outside the room but control it from inside the room. What I did was put a electrical outlet on the outside wall and split the two plug ins having one that is hot all the time for any other use and one that is controlled by a switch inside the room. Electricians call these receptacles “splits”, anyone can do it though you just break off the little brass connection on the hot side of the receptacle and run a wire up to the switch and back again.

Then when it came to the barrels I choose a place in a back corner and put in a full $\frac{3}{4}$ ” water line to fill the barrels and installed another electrical receptacle with a split switch system so I could control my sump pump when filling tanks after siphoning.



As you can see I planned out my sink location and gave thought to how many outlets I would need over the counter top. I use a dehumidifier in my room and it is on the counter and needed

a plug in, I use a small refrigerator that needed a plug in and I have a blender and food grinder I use from time to time for beef (deer) heart and dry foods.



Next I planned where my baseboard heater would go and where I would put the thermostat. I decided on the very rear wall for the 8 ft. heater and a location up near the entry door for the thermostat. It was somewhat of a guess on my part but I will tell you now that the room is complete the temperature is as even as I have ever seen a fishroom. This is the thermostat wall box.



One thing I failed to mention was the addition this time in my room of a ceiling fan. In my last room there was a definite difference in tank temperature from the very top row of tanks to the bottom row. In fact I have read articles where some breeders move their fish down each row as they get older. Well everyone has a difference of opinions and desires. I would like my tanks to be all the same temperature so I can put fish anywhere there is an "opening" so to speak. I will

tell you now after the room is finished the tanks are all the same temperature with the 52 inch fan running on medium all the time.



When it comes time for the plumbing rough-in work there isn't as much to think about as with the electrical. In fact I am hoping I have covered all the electrical thoughts I had as I was building this room. I believe I spent more time just sitting on a three foot step ladder trying to think about where wiring should go and for what than any other part of the room.

First of all try to plan for a good location for your sink. I used a laundry sink from Lowes as most people do. There are two models a regular sink and a heavy duty model for a few dollars more. I would by the heavier duty one.



As you can see the sink is on the floor and the hot and cold supply lines along with the drain pipe are roughed in the wall. I tapped into the hot and cold water pipes with a tee from Home Depot called Shark Bite Connection System. These fittings work on copper pipe and CPVC pipe

as both are the exact same dimensions. If your home is built with either, ours was built with copper, these tees will enable you to tap into a water line and then come off that line with your CPVC and go to where you want in your room. This is how the tap in looked.



For the drain out of the room I used 1 ½" PVC piping. Our home is on a septic tank so dumping all that water from water changes etc into the septic system was out of the question. Instead I decided to run a line under ground about ninety feet down hill to run out on the lower part of our lot. This works great for us as our lot slopes away from the house. You will have to do whatever is best for your situation.



I mentioned in an earlier edition of this article that I use barrels to store water simply to get enough water at the right temperature to do a water change without stopping and waiting on hot water. There is an alternative if you care to spend the money and that is to have a tank less hot water heater installed. These systems do not run out of hot water. The most popular is the

Rinnai. I tapped into our house supply water pipe with same type flare less tee and ran a full $\frac{3}{4}$ " line out the wall to fill the barrels. Then I used a one inch hose on the $\frac{3}{4}$ " pipe and believe me the barrels fill very rapidly.



When I did my drain system I put two tees in the 1 $\frac{1}{2}$ " drain pipe outside the room. One tee is for the dehumidifier to drain into which eliminates the need for emptying the bucket everyday. The other I use to run my self priming centrifugal pump into. I placed the pump outside the room to eliminate the annoying loud scream type noise these pumps make.



As far as the subject of insulation goes our basement has nine foot ceilings. I decided when I built this room to go with standard eight foot ceilings mainly for savings on construction costs. The studs are cheaper as is the coverage for drywall etc. As it turned out this was a real blessing when it came to insulate the room. Our home was already insulated in the basement ceiling throughout which is actually the floor of the upstairs if you get the picture. When it came time to insulate I decided to insulate the ceiling of the new room as well as the walls. This made for a nice layer on insulation above the room, then an open area of about nine to ten inches

where air could circulate and then the ceiling (or upstairs floor) with a ten inch layer of insulation. The room is very well insulated and extremely sound proof.



Next came the Dry Wall which is the only part of the room I did not personally do. I hired a local company to install 12 foot sheets of “green” Dry Wall on the ceiling and all four walls. “Green” Dry Wall is a Dry Wall product used by builders anywhere there will be a lot of moisture and humidity. This product is used extensively around showers and shower stalls. The Dry Wall contractor installed the drywall in one day, taped, sealed and sanded all the joints over the next three days and sprayed a heavy coat of primer on the fifth day. In less than a week the job was done and they were gone. I cannot even maneuver a sheet of ½ inch Dry Wall 12 foot long let alone finish the entire job in five days. Money well spent for me. I must mention I have some very good friends that have fish rooms finished in Styrofoam, not Dry Wall, and they function very well. I just wanted the room to look more like a room in our house so I went the Dry Wall way.



Next I painted the walls, painted the concrete floor and installed baseboard and painted that. This seem to take forever as I am not a very good painter and I don't enjoy painting much either. The two are probably related don't you think? I really like creating something, wiring especially and the other stuff but painting, yuck!



For a sink I bought the heavy duty model of the utility sinks Home Depot sells. They have two models and as soon as you see them you will know the difference and know why I bought the heavy duty one. For a counter top I purchased a 4 x 8 foot piece of a product Home Depot calls Melamine. They also sell smaller pieces of various size. I wanted a counter eight foot long so I bought the whole sheet. I then cut it the width of the counter top I wanted and then made a template from card board the size of the hole I wanted for the utility sink. Rather than use the legs that come with the sink which make it very low to the ground even for a short guy like me I just dropped it into the counter top once the proper size hole was sawed out. This saved a whole lot of money over normal counter top materials which my wife quickly spent on window treatments but that a whole other article series I probably will never write.



When doing my plumbing rough-in I added a connection to the drain line for my dehumidifier under the counter area which allowed me to place the de-humidifier on top of the counter and never worry about emptying it.



As an addendum I to my article I would like to mention it is now the middle of summer and my room is too hot. I could not seem to get it down to a reasonable temperature until this weekend. I moved the blower, small as it is, out of the room into the large part of the basement room and now the room is back to 80 degrees. I suspect even though I have the smallest blower Aquatic Eco Systems sells the heat it puts out is more than I can handle in the summer. I did put a cap without glue on the input inside the room as I fully intend to move it back once the cooler weather sets in. This maybe a problem only I have due to the insulation I added and the fact I live in the southeast but I mention it in case anyone has a too much heat problem.